AU/AWC/232/1998-04

AIR WAR COLLEGE

AIR UNIVERSITY

UKRAINIAN MISSILE NONPROLIFERATION: THE CHALLENGE FOR THE UNITED STATES' POLICY OF ENGAGEMENT

by

Jonathan P. Sunray, Lt Col, USAF

A Research Report Submitted to the Faculty

In Partial Fulfillment of the Graduation Requirements

Advisor: Lt Col Larry G. Walker

Maxwell Air Force Base, Alabama

April 1998

Report Documentation Page

Report Date	Report Type	Dates Covered (from... to)
01APR1998	N/A	-

Title and Subtitle Ukrainian Missile Nonproliferation: The Challenge for the United States' Policy of Engagement	**Contract Number**
	Grant Number
	Program Element Number
Author(s) Sunray, Jonathan P.	**Project Number**
	Task Number
	Work Unit Number
Performing Organization Name(s) and Address(es) Air War College Maxwell AFB, Al 36112	**Performing Organization Report Number**
Sponsoring/Monitoring Agency Name(s) and Address(es)	**Sponsor/Monitor's Acronym(s)**
	Sponsor/Monitor's Report Number(s)
Distribution/Availability Statement Approved for public release, distribution unlimited	
Supplementary Notes	
Abstract	
Subject Terms	
Report Classification unclassified	**Classification of this page** unclassified
Classification of Abstract unclassified	**Limitation of Abstract** UU
Number of Pages 45	

Disclaimer

The views expressed in this academic research paper are those of the author(s) and do not reflect the official policy or position of the US government or the Department of Defense. In accordance with Air Force Instruction 51-303, it is not copyrighted, but is the property of the United States government.

Contents

Page

Preface

I undertook this research project to educate and help prepare me for a visit to Ukraine under Air War College's Regional Study Program. My U.S. Air Force experience is related to space acquisition, and I wanted to learn about Ukraine's space and missile capabilities. Specifically, I wanted to understand how Ukraine was adapting its high level of technological expertise as a major designer and producer of Soviet satellites and missiles to the challenge of building a modern commercial space industry. Ukraine may be strongly tempted to sell its expertise and capabilities to "rogue" nations, but this would likely jeopardize its economic and political support from the U.S. and other Western nations. I became curious about how Ukraine was handling this dilemma, and how the U.S. was addressing it. The possibility of Ukrainian missile and technology proliferation is representative of many of the practical problems for the U.S. policy of engagement.

I am grateful to Lt Col Larry Walker and Dr Bill Martel for their many insightful comments and advice throughout this project. Their critiques and encouragement helped keep me focused and productive. I also appreciate the assistance of experts such as Mr Victor Zaborsky of the Center for International Trade and Security and Mr John Baker of the Space Policy Institute, both of whom educated me with their detailed personal knowledge of Ukrainian attitudes and policies in the space and missile arena. Finally, I am grateful to the silent partner in all my accomplishments, my wife, Shiela.

AU/SCHOOL/232/1998-04

Abstract

The nonproliferation of Ukraine's advanced ballistic missile technologies is a key challenge for Ukraine and the United States. Ukraine was the developer of many types of advanced Soviet ballistic missiles and space systems, and its challenge is to find economically and commercially viable alternatives for its missile design and manufacturing expertise. This is particularly important because Ukraine's need for hard cash increases its temptation to sell missile technology to "rogue" nations. The challenge for the U.S. is to facilitate Ukraine's economic transformation toward a market economy while discouraging the profitable sale and proliferation of its sensitive technologies. To this end, the U.S. has allowed Ukraine to compete in the U.S. space launch market, has encouraged international joint space ventures, and has helped Ukraine develop an export control system. Ukraine officially supports missile nonproliferation and has agreed to abide by the Missile Technology Control Regime (MTCR). Nevertheless, the U.S. has been concerned about the possibilities of missile technology leakage and the Ukrainian government's ability and willingness to control it. The U.S. must continue to offer incentives to help strengthen Ukraine's commitment to missile nonproliferation, minimize technology leakage, and encourage it to give up its ballistic missile capabilities. But the U.S. must also be sensitive to and address the economic, military, and political disincentives for Ukraine to fully support U.S. nonproliferation interests.

Chapter 1

Introduction

The "imperative of engagement" is fundamental to the United States' national security strategy and involves shaping the international environment in ways favorable to U.S. interests and security. Shaping the environment often requires balancing between competing and seemingly contradictory objectives. For example, the U.S. strategy is based on the principle that the "trend toward democracy and free markets throughout the world advances American interests."[1] At the same time, the U.S. recognizes that weapons of mass destruction (WMD) pose a major threat to global security,[2] and so the U.S. has aggressively negotiated agreements and treaties with other nations to control the proliferation of WMD capabilities and technology. As a result, nations that have advanced missile technology that might otherwise be sold for profit in a free market are highly discouraged by the U.S. from exploiting this economic opportunity.

Ukraine is an example of a newly-democratic nation whose economic development is encouraged and facilitated by the U.S. and other Western nations, but is also pressured by them to restrict potentially lucrative sales of its sensitive technologies. Ukraine is in the midst of a serious economic crisis, but it also possesses some of the world's most advanced and marketable missile and space technologies. Ukraine's space and missile expertise contributed immensely to the Soviet Union's sophisticated missile arsenal.

Ukrainian technological prowess also supported Soviet missile sales to nations like Libya, Iraq, and Iran, all of whom the U.S. and other Western nations view as regional security threats and are key subjects of WMD nonproliferation efforts. Restrictions on the sale of its missiles and missile-related technology, while essential for WMD nonproliferation, impacts Ukraine's economic growth opportunity.

This paper addresses U.S. incentives to influence Ukraine to support missile nonproliferation, and analyzes several disincentives for Ukraine to fully support U.S. interests. Chapter 2 discusses the importance of the Missile Technology Control Regime (MTCR) as an international missile nonproliferation mechanism, U.S. interests in encouraging Ukraine to join, and Ukraine's objections to joining. Chapter 3 examines Ukraine's choppy progress in developing an export control system, which is a critical element for controlling its missile technology and implementing nonproliferation policy. Chapter 4 discusses the U.S. incentives to convince Ukraine to support nonproliferation and join the MTCR. Chapter 5 addresses several disincentives that may impact Ukraine's full support for nonproliferation and its reasons for not joining the MTCR. Finally, Chapter 6 concludes with an outlook for Ukraine's missile nonproliferation policy and what the U.S. could do to encourage Ukraine to strengthen it.

Notes

[1] The White House, *A National Security Strategy for a New Century* (May 1997), 2.
[2] Ibid., 6.

Chapter 2

The Missile Technology Control Regime

The Missile Technology Control Regime (MTCR) is the cornerstone of U.S. policy on missile nonproliferation. The regime is a non-treaty association of nations with the goal of limiting the proliferation of rockets, missiles, unmanned air vehicles and related subsystems and technology applicable to the delivery of weapons of mass destruction (WMD). The regime has established export control guidelines and a technical annex of controlled items. Each partner (i.e. the "members" in the language of the regime) implements the regime through its own national export control systems and applies sanctions based on its respective trade laws.

The regime distinguishes between two categories of sensitive missile items. Category I includes complete rocket, missile and unmanned air vehicle systems, major subsystem components and key technologies associated with the capability to deliver at least a 500 kilogram (kg) payload at least 300 kilometers (km).[1] The regime presumes that each partner will strictly limit, if not totally deny, the export of Category I items. Missile production facilities cannot be exported, according to the regime's guidelines.[2] Category II items include rockets, missiles and unmanned air vehicles which are capable of at least a 300 km range, as well as components and subsystems, such as propellants, materials, test equipment and flight instruments.[3] These items are considered only

slightly less sensitive, and may be exported with careful consideration and assurance that the end user will not apply the items to any WMD program. The MTCR is not intended to impede international cooperation toward the development of peaceful space-related launch capabilities. But partners of the regime are expected to ensure that any exports of space-related technology, even if not explicitly included in the MTCR technical annex, are not used or diverted for WMD purposes. This assurance is achieved through the guarantees of the end user and monitoring by each nation's export control service.

The U.S., Canada, West Germany, Italy, Japan, France and the United Kingdom established the MTCR in 1987, and it has grown to 29 partners.[4] The partners approve the admission of new members and decide regime issues via consensus. While the regime does not provide explicit economic benefits to its partners, the incentives for joining include promotion of international security through nonproliferation, enhanced standing and respectability in the international community, and the increased opportunities for technological cooperation and information sharing "within the club." The transfer of technology between MTCR partners is often facilitated and expedited by the mutual understanding and confidence between the partners.

In 1993 the U.S. became concerned that some governments were attempting to join the regime in order to gain access to advanced missile technologies unavailable to them outside the regime. The danger, in the Clinton Administration's view, was that the MTCR would turn into a missile technology bazaar.[5] To prevent any erosion of the regime's nonproliferation goal, President Clinton issued a policy in September 1993 whereby the U.S. requires all prospective new partners to eliminate their current, and renounce any future, Category I missile programs. In addition, new partners must have

effective export controls and be members in good standing of other nonproliferation agreements, such as the Nuclear Nonproliferation Treaty and the Chemical and Biological Weapons Conventions.[6] The consensus rule governing MTCR decisions enables the U.S. to effectively impose its policy on the accession of all new partners.

Ukraine's partnership would strengthen the MTCR, particularly since it has extensive expertise in the design and manufacturing of the type of missiles the regime is most concerned about controlling. Another concern is Ukraine's possession of 130 operational SCUD-B ballistic missiles (with greater than a 500 kg payload/300 km capability), which it inherited with the dissolution of the Soviet Union.[7] However, Ukraine has so far been unwilling to give up its short-range ballistic missile systems and manufacturing capabilities, as the U.S. MTCR policy requires of prospective new members. The U.S. has been unwilling to make an exception for Ukraine because it does not want to encourage additional ballistic missile programs.[8] The two countries are at an impasse.

Ukraine's Space and Missile Expertise - Concern and Opportunity

Ukraine is very proud and protective of its space and missile industry and its accomplishments. The major enterprises devoted to the Ukrainian missile and space program are the *Yuzhnoye* design bureau and the *Yuzhmash* manufacturing plant (hereafter both will be referred to simply as *Yuzhnoye*) located in the city of Dnipropetrovsk *Yuzhnoye* is Ukraine's largest aerospace enterprise. With its two million square feet of floor space, it is also the largest facility of its kind in the world. At its peak employment, prior to Ukraine's independence from the Soviet Union, *Yuzhnoye* employed 50,000 workers, but that number had come down to about 34,000 employees by

1996.[9] The design and manufacturing facilities have existed for over 40 years and were responsible for producing thirteen types of Soviet medium, intermediate and intercontinental ballistic missiles (ICBM's), and contributed about 40 percent of the Soviet Union's space production capacity.[10] The largest ICBM's included the SS-18 and SS-24, each capable of launching 10 independently-targetable warheads. *Yuzhnoye* also produced approximately 60 types of space satellites, mostly for remote sensing missions.[11] ICBM production ended in 1991, but the facilities are currently producing the *Zenit* and *Tsyklon* space launch vehicles (SLV's) that are the backbone of Ukraine's commercial space launch business.

With its vast missile expertise it is not surprising that Ukraine's defense strategy relies on preserving its missile production base. Conventional missiles have become a significantly more appealing and less costly alternative to a buildup of tanks and airplanes for the cash-poor Ukrainian Defense Ministry. A conventional missile capability has also assumed greater significance since Ukraine agreed to eliminate its nuclear weapons.

Weapons Denuclearization Sets the Precedent for Missile Controls

When Ukraine declared its independence in August 1991, it had on its territory the third largest nuclear arsenal in the world.[12] It inherited 176 Soviet strategic nuclear missiles (SS-19's and SS-24's, both with multiple independently targetable warheads), 30 strategic bombers, and approximately 1900 strategic and 2500 tactical nuclear warheads.[13] In 1991 Ukraine's first president, Leonid Kravchuk, declared that Ukraine should have the status of a "non-nuclear state," and that Ukraine would abide by the arms control treaties that were signed by the Soviet Union.[14]

In May 1992 the leaders of Ukraine, U.S., Russia, Kazakstan, and Belarus signed the Lisbon Protocol to the Strategic Arms Reduction Treaty (START 1), which transferred the START 1 obligations of the Soviet Union to the new states. Article V of the Lisbon Protocol additionally required that Ukraine, Kazakhstan and Belarus join the Nuclear Non-Proliferation Treaty (NPT) as non-nuclear weapon states in "the shortest possible time.[15] Conservative and extremist groups in the Ukrainian parliament charged that Ukraine was being pressured to give up its sovereignty and security and was a "hostage of the policies of other countries."[16] But the parliament eventually sided with President Kravchuk's view that Ukraine's "future as a sovereign state depends not on nuclear weapons but on economic prosperity,"[17] and ratified START 1 in February 1994. In November 1994 the parliament voted to conditionally approve Ukraine's accession to the NPT, provided it received "security guarantees" from Russia, the U.S., France, Great Britain and China. The guarantees were made and Ukraine's NPT membership became a reality in December 1994. With several hundred million dollars of assistance provided by the U.S. under the Cooperative Threat Reduction (CTR) program, as well as assistance from other nations, Ukraine eventually dismantled and sent its nuclear weapons to Russia by June 1996. The CTR program is also supporting the destruction of Ukraine's SS-19 and SS-24 strategic missile launchers.

Progress Toward A Ukrainian Missile Nonproliferation Policy

Ukraine's denuclearization dominated U.S.-Ukrainian negotiations in 1991-1994, leaving the missile proliferation issue in the background. However, once a denuclearization deal was fairly well worked out, the U.S. turned its attention to the

missile nonproliferation issue. A major step forward occurred with the signing of a U.S.-Ukraine memorandum of agreement in May 1994, in which Ukraine pledged its adherence to MTCR guidelines as a non-partner. This agreement signaled Ukraine's official intent to restrict the export of its most sensitive missiles and technologies. The U.S. views this policy as an important step toward Ukraine's formal partnership in the MTCR. But the two countries have opposing views on the conditions for full partnership.

Policy Divergence on Ukraine's MTCR Partnership

Ukraine is strongly opposed to the U.S. MTCR admission policy because it believes, first, Ukraine may need its own short-range Category I missiles for deterrent purposes; second, the MTCR is an export control regime, not a missile disarmament treaty; third, the U.S. policy is discriminatory in nature because it is not applied to all MTCR members (including Russia, which agreed to follow MTCR guidelines before the new U.S. policy was established, but formally applied for membership afterwards); and fourth, Ukraine has a mature missile and space industry and it is unwilling to accept restrictions now that could constrain future development programs and possibly lead to further displacement of workers.[18] Given its disagreement with the U.S. policy for MTCR admission, Ukraine has sought to establish a legal basis for maintaining its current missiles and leaving open the option of developing new missiles.

As a successor state to the Soviet Union, Ukraine is obliged under the Intermediate-range Nuclear Forces treaty (INF) not to produce or deploy ground-launched missiles with ranges between 500 and 5500 km.[19] But Ukraine is under no treaty obligation to restrict conventional missiles with ranges under 500 km, and so the government has

adamantly defended its legal right to maintain such a capability. A 500 km range, incidentally, would be sufficient to reach Moscow.

Ukraine's missile policy preserves the current SCUD-B's and the country's missile design and manufacturing capabilities for potential future programs. The U.S. is concerned that these capabilities increase the risk of proliferation, even though Ukraine has pledged not to export its missiles and sensitive technology. Ukraine's economic crisis and its need to raise hard cash may tempt it to sell its missiles and technology to "rogue" nations like Libya, Iraq, Iran and North Korea, and other nations of concern, such as India, Pakistan and China.

The fulfillment of Ukraine's pledge to adhere to MTCR provisions depends on the commitment of government and industry officials to ensure sensitive items and technologies are carefully controlled and do not get transferred to the "wrong" user. To this end, the U.S. has closely monitored and assisted the evolution of Ukraine's export control system.

Notes

[1] Arms Control and Disarmament Agency, "Missile Technology Control Regime (MTCR) Guidelines," 11 June 1996, n.p.; on-line, Internet, 6 Nov 97, available from http://www.acda.gov/treaties/mtcr.htm.

[2] "Missile Technology Control Regime (MTCR) Equipment and Technology Annex," 1 July 1993, n.p.; on-line, Internet, 16 Nov 97, available from http://www.fas.org/asmp/ campaigns/missiles/techannex.htm.

[3] Arms Control and Disarmament Agency, "Missile Technology Control Regime (MTCR) Guidelines"

[4] The current partners are Argentina, Australia, Austria, Belgium, Brazil, Canada, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Russia, South Africa, Spain, Sweden, Switzerland, Turkey, United Kingdom, and the United States of America.

[5] Gary Bertsch and Victor Zaborsky, "Bringing Ukraine Into the MTCR: Can U.S. Policy Succeed?" *Arms Control Today* 27, no. 2 (April 1997): 4.

Notes

[6] John C. Baker, *Non-Proliferation Incentives for Russia and Ukraine*, Adelphi Paper 309 (New York: Oxford University Press, Inc.1997), 38.

[7] Gary Bertsch and Victor Zaborsky, "Bringing Ukraine Into the MTCR: Can U.S. Policy Succeed?" 10.

[8] The U.S. appears to have made an exception to its MTCR admission policy for Ukraine. At a 6 March 1998 signing ceremony in Kiev for several agreements between the U.S. and Ukraine, Secretary of State Albright stated the U.S. has agreed "to support Ukraine's immediate admission to the MTCR. At the same time, President Kuchma of Ukraine stated that Ukraine "is not going to trade tactical missiles" in connection with supporting MTCR. It is still unclear from publicly-available sources what the Ukrainians have decided to do with the current missiles in the long term, and whether they have given the U.S. some type of assurance that they will not pursue any further missile development activities. "Secretary of State Madeleine K Albright and President of Ukraine Leonid Kuchma and Foreign Minister Haddadiy Ukovenko Remarks at Signing Ceremony on Several Agreeements, Mariinskiy Palace, Kiev, Ukraine, March 6 1998" , n.p.; on-line, Internet, 30 March 1998, available from http://secretary.state.gov/www/statements/1998/980306a.html.

[9] John C. Baker, *Non-Proliferation Incentives Project: Aerospace Industries Workshop and Ukraine Trip Report*, (London: International Institute of Strategic Studies, August 1996), 18.

[10] Victor L. Zaborsky, *Ukraine's Niche in the US Space Launch Market: Will Kiev's Hopes Come True?* (Washington, D.C.: The National Council for Soviet and East European Research, 25 October 1996), 2.

[11] Ibid., 17.

[12] U.S. Congress, Office of Technology Assessment, *Proliferation and the Former Soviet Union*, (Washington, D.C.: U.S. Government Printing Office, September 1994), 77.

[13] Department of Defense Background Briefing, *Secretary of Defense Trip to Ukraine*, June 1996, n.p.; on-line, Internet, 27 October 1997, available from http://defenselink.mil/news/Jun1996/x060496_x0529ukr.html.

[14] Mark D. Skootsky, "An Annotated Chronology of Post-Soviet Nuclear Disarmament 1991-1994," *The Nonproliferation Review* 2, no. 3 (Spring-Summer 1995): 66.

[15] Ibid.,70.

[16] Ibid.,96.

[17] Ibid.,85.

[18] Gary Bertsch and Victor Zaborsky, "Bringing Ukraine Into the MTCR: Can U.S. Policy Succeed?" 12.

[19] Victor Zaborsky, *Ukraine: How to Fulfill START Obligations and U.S.-Ukraine Face a Missile Impasse*, (Washington, D.C.: The National Council for Soviet and East European Research, 25 October 1996), 4.

Chapter 3

The Evolution of Ukrainian Export Controls

When it was a Soviet republic, Ukraine had no need to establish and manage an export control system because the central authorities in Moscow administered Soviet exports. With its independence, Ukraine inherited a substantial military industrial base of 1840 enterprises employing 2.7 million people.[1] Ukrainian enterprises also accounted for one third of the factories in the Soviet military-industrial complex.[2] But independence also created a dire financial situation for Ukraine because its economy was no longer supported by the Soviet system. Military-industrial exports fell from $1.5 billion in 1990 to $300 million in 1992.[3] Gross domestic product between 1990 and 1993 fell by 36 percent, with inflation in 1993 averaging 70-90 percent per month.[4] Ukraine understands the critical importance of boosting its exports in order to inject hard currency into the economy. However, after independence, it had no export control infrastructure and had to develop one from the ground up.

Ukraine took its first legal steps for controlling exports in April 1991, when the Ukrainian Parliament passed the Act on Foreign Economic Activity. The act specified that the export and import of weapons, nuclear and other explosive material and sensitive technologies for producing weapons required state authorization. This act was adopted while Ukraine was still part of the Soviet Union but its intent was to establish Ukraine's

sovereignty and prevent uncontrolled withdrawal of commodities to Russia.[5] Afterwards, Ukraine progressively established a number of commissions and policies to build and strengthen its export control system. In March 1992 the Ukrainian Cabinet of Ministers established the Government Expert-Technical Commission, headed by the Ministry of Machine Building, Military-Industrial Complex and Conversion to make decisions on imports and exports, and to draft export control laws. The commission was relatively short lived because the government recognized that the effective implementation and oversight of an export control system required the involvement of a broader range of agencies and ministries. Before its replacement, the commission recommended and the Ukrainian Parliament approved new legal codes and punishments ranging from 3 - 8 years imprisonment and/or seizure of property for violations of the export/import procedures.[6]

In January 1993 two new organizations, the Governmental Commission on Export Controls (GCEC) and its subordinate Expert-Technical Committee (ETC), replaced the Government Expert-Technical Commission. The GCEC was comprised of the heads or deputies of all ministries and agencies involved in the export of controlled items. It developed export/import policies, ensured coordination among all the players involved in the export process and approved export/import licenses. The ETC was the technical working group for the GCEC and its functions included evaluating requests for export/import licenses, developing controlled-item lists, and recommending export procedures and policies. The significance of the creation of the GCEC and the ETC was that it raised the stature and visibility of the export control process to the level of Ukraine's Cabinet of Ministers, which is directly subordinate to the President and Prime

Minister. This was an important development, for it demonstrated Ukraine's seriousness in managing its export process. It was also a necessary step towards gaining acceptance from Western countries as a responsible arms exporter.

By 1994 Ukraine clearly understood that its commercial opportunities with Western firms and its access to the international arms market would be enhanced if it demonstrated a strong commitment to WMD nonproliferation. This would require its participation in export control regimes and bringing its export control system into conformity with them. In 1994 Ukraine agreed to adhere to the MTCR and joined the NPT. In 1996 it joined the Wassenaar Arrangement on export controls for conventional arms and dual-use goods and technologies. To support its MTCR adherence, Ukraine began developing the appropriate procedural guidance and control lists for its missile-related industries. In July 1995 Ukraine's Cabinet of Ministers approved the *Regulations Guiding the Control Over the Export, Import and Transit of Missile Technology Items, as Well As of Equipment, Materials and Technology Used in the Manufacture of Missile Weapons,* which essentially established the export procedures and an item control list compatible with that of the MTCR.[7]

A December 1996 decree by the President of Ukraine replaced the GCEC with the Government Commission on Export Control Policy (GCECP) and the ETC with the State Export Control Service of Ukraine. The GCECP provides high level policy, decisionmaking, and administrative oversight over the import/export process. Its membership includes representatives, but not necessarily the directors or deputy directors, from the ministries and agencies involved with regulating controlled item transfers. The State Export Control Service is the central executive agency that implements the day-to-

day export/import control process. It performs many of the same technical and operational functions of the ETC, and it also took over most of the export licensing responsibilities of the prior GCEC. It is also directly subordinate to the Cabinet of Ministers, rather than to the GCECP.

In addition to these organizational changes, in the fall of 1996 Ukraine consolidated all of its arms sales brokers under one government-run company, *Ukrspetseksport* (Ukrainian Special Exports). The purpose of establishing a single company to initiate and negotiate arms deals was to facilitate accountability and adherence to export regulations and procedures. It is noteworthy that *Ukrspetsekspor*t is headed by an experienced counter-intelligence employee of the Ukrainian security service,[8] which suggests that the government has a high degree of interest in maintaining vigilance over the export control process.

But Ukrainian authorities have now changed their views since *Ukrspetseksport* was formed. Whereas centralized control by a single company was viewed as advantageous just over a year ago, Ukrainian officials now consider it "monopolistic," and are allowing a number of the major arms enterprises to market their own products directly to foreign buyers. With Ukraine's arms sales reaching $185 million in 1996, making the country one of the top ten arms sellers in the world, the government does not want to limit the competitiveness of its arms industry.[9] As stated by Vasyl Hureyev, the Ukrainian Minister of Industrial Policy, "The bigger the number of competitive companies and enterprises operating on the foreign market, the easier the task of conquering that market."[10]

The direct marketing and export of Ukrainian arms by a dozen or more arms producers may certainly boost the amount of exports, but it also increases the risk of proliferation of WMD technology. While military and space production and technology firms are still required to obtain export licenses, the increased interaction with foreign buyers and the absence of a government middleman in the transfer of weapons and technology increases the opportunity and risk of illegal arms transfers. As the arms sales process becomes more decentralized, it will be more critical for the Ukrainian government to closely monitor its arms industry, and effectively administer the licensing process. To this end, for example, Victor Vaschillin, director of the State Export Control Service of Ukraine has emphasized Ukraine's firm commitment to "increase [the] international standing of Ukraine...with regard to nonproliferation of WMD," and "secure the economic interests of the producers while abiding by international export control regulations."[11] He has identified the following tasks to strengthen Ukraine's export control system: 1) enact laws on export control rather than rely solely on Presidential decrees and policy statements; 2) improve the interagency coordination process for evaluating licensing requests; 3) introduce automated export control technologies for licensing and monitoring; and 4) introduce a single and comprehensive list of controlled items.[12]

The Effectiveness of the Ukrainian Export Control System

Ukrainian authorities appear to understand the importance of a robust export control system and have taken steps to establish the organizational structures to implement such a system. Their aim has been to establish an export control system that is up to international

standards to minimize the risk of proliferation, and to protect the economic interests of Ukraine by limiting technology leakage. Given the fact that seven years ago Ukraine did not have any significant export control infrastructure and experience, it is not surprising that its progress has evolved from various export commissions and it has experimented, for example, with different implementations of the export/import company concept. It is understandable that its evolving export system has undergone transformation and change. One positive factor is that Ukraine has been receptive to Western technical advice, particularly from the U.S. For example, under the CTR program Ukraine has received about $13 million of assistance for organizing and modernizing its export control system.[13] According to The Center for International Trade and Security, a U.S. research organization at the University of Georgia that monitors and studies nonproliferation and export control issues, Ukraine has improved its export control system in a number of areas, such as licensing, training, control lists, verification, and customs authorities.[14]

Notes

[1] Taras Kuzio, "Ukraine's Military Industrial Plan," *Jane's Intelligence Review*, August 1994, 352.

[2] FBIS-SOV-97-019, 30 January 1997, n.p.; on-line, Internet, 18 November 1997, available from http://fbis.fedworld.gov.

[3] Igor Egorov, "The Transformation of R&D Potential in Ukraine," *Europe-Asia Studies*, 47, no. 4 (4 November 1995):662.

[4] Ibid.,655.

[5] Victor Zaborsky and Scott Jones, "Ukraine," in *Restraining the Spread of the Soviet Arsenal: NIS Nonproliferation Export Controls*, ed. Gary Bertsch (Athens, GA: The Center for International Trade and Security, 1996), 19.

[6] Victor Vaschilin, "State Export Controls in Ukraine," *The Monitor* 3, no. 3 (Summer 97): 12.

[7] Vladimir Tsimbalyuk, "Export Controls in Ukraine,' *The Monitor* 1, no. 4 (Fall 1995): 3.

[8] FBIS-TAC-97-007, 2 June 1997, n.p.; on-line, Internet, 6 November 1997, available from http://fbis.fedworld.gov.

Notes

[9] FBIS-SOV-97-258, 16 September 1997, n.p.; on-line, Internet, 2 December 1997, available from http://fbis.fedworld.gov.

[10] Ibid.

[11] Victor Vaschilin, "State Export Controls in Ukraine," 14.

[12] Ibid.

[13] Ibid.

[14] Cassady Craft et al., "Nonproliferation Tools and Methods for Evaluating National Systems of Export Control," in *Restraining the Spread of the Soviet Arsenal: NIS Nonproliferation Export Controls*, ed. Gary Bertsch (Athens, GA: The Center for International Trade and Security, 1996), 85.

Chapter 4

Incentives for Missile Nonproliferation and MTCR Partnership

Ukraine's missile nonproliferation commitment and its partnership in the MTCR are two related issues but they need to be addressed separately from the standpoint of incentives. Incentives for nonproliferation need to focus on 1) shaping Ukraine's perspective toward those countries that pose a regional security threat with their missile capabilities; and 2) providing meaningful and long-lasting financial alternatives to selling missiles and technology to these countries. The objective of U.S. efforts to shape an enduring and self-sustaining Ukrainian nonproliferation policy is to ensure that Ukraine does not yield to temptations to sell its sensitive missile technologies to rogue states and other nations of concern.

Incentives for encouraging Ukraine's partnership in the MTCR need to address its defense and sovereignty concerns, which are at the heart of its refusal to accept the U.S. requirement for giving up its Category I missile capabilities. Ukrainian partnership in the MTCR would be an important symbol of its commitment to nonproliferation. Clearly, Ukraine can be a responsible nonproliferator while not a partner of the MTCR. But joining the MTCR would likely reinforce Ukraine's commitment through information

exchanges and contact with other nonproliferators, enhance its prestige among the international community, and possibly facilitate commercial joint ventures with MTCR partners who might have more confidence in Ukraine's reliability as a nonproliferator.

Incentives for Nonproliferation

The U.S. and other Western nations recognize the significance of providing ample opportunities to channel Ukraine's advanced space and missile expertise into "acceptable" commercial and international cooperative space efforts. Ukraine is very eager to develop space-related partnerships with Western businesses and organizations because they can provide a source of much-needed funding and marketing exposure for Ukrainian technical capabilities.

The 1994 election of Ukraine's second president, Leonid Kuchma, gave a significant boost to the space sector. Kuchma and about fifty other high-ranking politicians, are referred to by the Ukrainian media as the "clan from Dnepropetrovsk [*sic*]," for they all have close ties to the missile and defense industries in that city.[1] Kuchma was *Yuzhnoye's* director for eleven years and is a staunch promoter of Ukraine's space capabilities. He and the government believe that the development of a competitive space industry is of crucial importance to improving the country's difficult economic situation, promoting other related industries, and contributing to Ukraine's international standing.[2]

President Kuchma's interest in promoting the Ukrainian space program has been met by a responsive U.S. administration intent on offering Ukraine viable opportunities and incentives for applying its space and missile expertise for peaceful economic development and growth in consonance with U.S. nonproliferation interests.

Commercial Launch Incentives

In 1994 President Kuchma and President Clinton signed an "umbrella" space agreement that empowered each nation's space agencies to collaborate directly on joint projects without having to consult constantly with their respective heads of state.[3] This agreement paved the way to a more profitable agreement in February 1996, providing Ukraine with favorable terms for competing for up to 20 American geosynchronous satellite launches with the *Zenit and Tsyklon* SLV's through the end of 2001.[4] This agreement is significant because it demonstrates U.S. confidence in Ukrainian space launch services. It was understandably opposed by U.S. launcher manufacturers, who perceived the deal as a threat to their survival and who claimed that their "ability to compete internationally should not be sacrificed to nonproliferation goals."[5]

One of the more interesting commercial ventures for Ukraine's rocket industry is *Sea Launch*, a Boeing-led consortium of Ukrainian, Russian, and Norwegian companies planning to launch *Zenits* from a transportable platform in the Pacific. The first launch is scheduled in 1998. The *Zenit* is capable of launching up to 15,000 kg into low earth orbit and about 2800 kg into geosynchronous orbit.[6] The *Zenit* will also be busy in 1998 with three scheduled launches of 36 *Globalstar* cellular communications satellites. The *Zenit* is a highly automated launching system, and will adapt Ukraine's expertise in multiple, independently- targeted warhead technology to the task of deploying twelve commercial Globalstar satellites per launcher.

In addition to its commercial commitments with U.S. companies, Ukraine's space industry has also negotiated launch arrangements with Chile and Russia, and supports the international consortium that will develop the International Space Station.[7] For example,

the National Space Agency of Ukraine (NSAU) and NASA are working on the International Space Welding Experiment, which will test an electron beam welding tool for repairs on the space station.

Ukraine is extremely proud of its aerospace achievements and capabilities, such as its state-of-the art space launch vehicles, space welding expertise, guidance and control technology, as well as satellite and aircraft manufacturing. Kiev is home to the Antonov aircraft design bureau, developer of the world's largest transport aircraft, the An-225. Commercial-related successes, such as *Sea Launch* and the 1996 U.S.-Ukrainian commercial launch agreement recognize Ukraine's reliability and technical competence. Encouraging the involvement of Ukrainian space enterprises in joint commercial ventures has the dual benefit of pairing the enterprises with Western firms that can enhance their chances for economic success, while reminding them of the importance of abiding by nonproliferation standards in their business agreements.

U.S. Financial Incentives

U.S. financial assistance to Ukraine provides another opportunity to help shape its nonproliferation policies. Ukraine is the third largest recipient of U.S. aid, receiving nearly $1.4 billion since 1992.[8] Nearly $450 million of this assistance has been provided under the CTR program for a broad range of activities, including nuclear weapons dismantlement, strategic missile and aircraft dismantlement, defense conversion, and export control implementation. U.S. assistance has enabled Ukraine to fulfill its goals of becoming a non-nuclear weapons state and to help build its market-based economy.

Shaping Ukraine's National Defense and Regional Security Perspective

Ukraine's developing relationship with NATO reinforces its understanding of the benefits of global stability and security and, therefore, can be viewed as an incentive for nonproliferation. Through military exchanges, exercises, and joint operations under the NATO Partnership for Peace program, for example, the security of Ukraine and its neighbors is strengthened. Former Ukrainian President Kravchuk called the initiative "an important step...in building a European security system, in bringing together Eastern and Western Europe."[9]

The NATO-Ukraine Charter, which was signed on 9 July 1997, offers another incentive for Ukraine to subscribe to Western standards of nonproliferation. The agreement recognizes that a strong, enduring relationship between NATO and Ukraine is essential to the security of Europe and Ukraine. The charter promotes consultation and cooperation on defense and security issues, provides for the establishment of a Ukrainian military liaison mission at NATO headquarters in Brussels, and provides for a crisis consultative mechanism "whenever Ukraine perceives a direct threat to its territorial integrity."[10] Highlighting the importance of the charter to Ukraine, President Kuchma stated that "the formation of a favorable international environment gives us an opportunity to focus on resolving the topical internal problems, first of all, to continue profound transformation in our economy and further democratization of our society."[11] With the desirability and benefits of its developing relationship with NATO, Ukraine is certainly less likely to support WMD proliferation, knowing this would be counter to the policies of its Western partners.

Notes

[1] Jane Perlez, "On Ukraine's Capitalist Path, Clique Mans Roadblocks," *New York Times*, 18 October 1996.

[2] Victor L. Zaborsky, *Ukraine's Niche in the US Space Launch Market: Will Kiev's Hopes Come True?* (Washington, D.C.: The National Council for Soviet and East European Research, 25 October 1996), 3.

[3] Ibid., 4.

[4] Ibid., 5.

[5] Ibid.

[6] Bretton Alexander, *Space Launch and Ukraine – Outlook for the Future*, (Virginia: Anser Center for International Aerospace Cooperation, 23 May 1996), 2.

[7] John C. Baker, *Non-Proliferation Incentives Project: Aerospace Industries Workshop and Ukraine Trip Report*, (London: International Institute of Strategic Studies, August 1996), 15.

[8] Dana Priest, "Ukraine Savors New Ties With NATO," *Washington Post*, 14 July 1997.

[9] Taras Kuzio, *Ukrainian Security Policy*, (Westport, CT: Praeger, 1995), 57.

[10] FBIS-SOV-97-190, 10 July 1997, n.p.; on-line, Internet, 2 December 1997, available from http://fbis.fedworld.gov.

[11] The White House, Office of the Press Secretary, "Transcript of Remarks by President Clinton, Prime Minister of Spain Aznar, Secretary General of NATO Solana, and President Kuchma of Ukraine in Signing Ceremony of NATO-Ukraine Charter," 9 July 1997, n.p.; on-line, Internet, 25 January 1998, available from http://www2.whitehouse.gov/WH/New/Spain/19970709-2125.html.

Chapter 5

Disincentives for Ukrainian Missile Nonproliferation and Joining MTCR

> *Ukraine is not going to construct its strategic partnership with the United States on the basis of Washington's unilateral demands.*
>
> -Ukrainian President Kuchma, 1997

Notwithstanding Ukraine's 1994 agreement to abide by the MTCR guidelines, there are still some practical concerns regarding Ukraine's commitment to proliferation. The effectiveness of any export control system is only as good as the commitment of government and industry to abide by it, and not bypass it for the sake of business. In Ukraine's struggling economy, the lure of hard cash in return for sensitive missile technology is especially tempting, and is thus a disincentive for upholding nonproliferation.

The disincentives for Ukraine to give up its missile capabilities in order to join the MTCR are that it believes it needs the missiles for its defense and that it has a legal and sovereign right to them.

A Different Ukrainian Perspective on Proliferation

Other than the economic disincentive for supporting nonproliferation, another factor that may weaken Ukraine's commitment is its perception of the security threat posed by

those nations who are the subject of Western nonproliferation policy. The U.S. and other Western nations have focused on preventing the proliferation of WMD-related missile technology and systems to "rogue" nations, such as Libya, Iraq, Iran, Syria and North Korea, as well as to other nations of security concern, such as India, Pakistan, and China. All these nations have been eager to acquire advanced missile systems and technology for WMD purposes, and are considered to be threatening to regional stability. Yet, many of these nations were principal customers of the Soviet Union's missile industry, which means they were also customers, to a great degree, of the Ukrainian missile industry. Thus, Ukraine's perspective on these nations would naturally be conditioned by its historical economic and military relationships with them. Even today, for example, Ukraine still maintains economic ties with and sells military small arms to Iran, and is helping Syria maintain and upgrade its tank force.[1] It is not surprising, therefore, that the Ukrainian perspective on the security threat posed by these countries may not exactly mirror Western views.

Alexander Negoda, director general of the National Space Agency of Ukraine commented in 1995 that

> "For other countries, transfer of their missile technologies means transfer of secrets and a threat to their national security interests. For Ukraine, there is no direct threat to its national security from the sales of its missiles and related technologies. That makes Ukraine a unique country. In fact, having taken obligations on missile nonproliferation, Ukraine contributes to the security of other countries more than it does for its own security."[2]

A Potentially Significant Problem of Technology Leakage

The Ukrainian military industrial complex is viewed by many Ukrainian officials as a principal means of generating financial benefits to Ukraine. Volodmyr Mukhin, chairman

of Ukraine's Defense and State Security Commission has stated that the Ukrainian armed forces cannot, by themselves, justify the existence of the current military-industrial complex. Furthermore, "its intelligent use could bring major financial infusions into Ukraine's economy," and "problems concerning the use of the military-industrial complex should be approached exclusively from the angle of [Ukraine's] national interests."[3]

In late 1996 the Center for International Trade and Security commented that

> "from a proliferation standpoint, a serious concern arises from the presence of corruption coupled with organized crime. Many high-ranking officials are taking advantage of the absence of comprehensive export control legislation...the severe economic crisis in Ukraine has threatened the political survival of the President, the government, and the Parliament, and it is very hard to make a decision to restrict exports, since exports create jobs and are expected to improve the Ukrainian economy."[4]

It is difficult to assess how much "leakage" of sensitive technologies has occurred or may be occurring. A 1996 Ukrainian press article, for example, suggested that no more than 20 percent of total arms export operations in Ukraine were conducted by official government export authorities, with the remainder handled by "shadow" structures operating with "highly positioned" sponsors.[5] According to the article, the shadow sector "skillfully evades taxes, selling its products through various sham firms...high profits help the shadow sector employ Ukraine's best brains and easily overcome any obstacles due to support from top level officials."[6] Shadow exports from Ukraine since independence have reportedly exceeded $2 billion.[7]

While Ukraine has progressed in developing an export control system, and has made commitments to uphold several international nonproliferation and arms control agreements, its actions have reportedly not been consistent with these commitments.

Several disturbing events and allegations of technology transfer raise concerns about the solidity of Ukraine's stated commitments. In late 1993 Ukraine reportedly sold 8 SS-N-22 *SUNBURN* supersonic anti-ship missiles to Iran.[8] In 1995 the Washington Post reported claims by U.S. and UN officials that Iraq had violated UN sanctions by setting up a covert network of companies and purchasing agents to buy ballistic missile components and technology from Ukraine and other countries.[9]

The Chinese have also been keenly interested in obtaining technology and data from Ukraine and Russia on ICBM's. In January 1996 three Chinese nationals visiting *Yuzhnoye* were caught with documents related to the design of ICBM engines.[10] In mid-1996, after a leaked U.S. intelligence report revealed that China was exploring the possibility of buying SS-18 components and technology, the U.S. issued *demarches* to both Russia and Ukraine to convey its strong opposition to any such transfer and to remind them that such transfer would be contrary to their nonproliferation commitments. Russia is the only country that has the Ukrainian-built SS-18's.

In December 1996 the Washington Times wrote, based on data reportedly provided by the CIA, that Ukraine has agreed to sell short-range ballistic missiles to Libya and service several of its Russian-made submarines as part of a military cooperation agreement.[11] The Ukrainian Ambassador to the U.S. denounced the entire story as "complete nonsense," and reiterated Ukraine's commitment to responsible international behavior and to nonproliferation of WMD.[12] Victor Vashchilin, Chairman of the State Export Control Service has also stated that Ukraine complies "precisely with international control procedures" and that its "main objective is to support the national interests and security of Ukraine, not creating a threat by the sale of weapons to regions where they

would contribute to a destabilization of the situation."[13] Since the initial Washington Times article, there has not been any significant open-press confirmation of the allegations nor any apparent negative fallout in the U.S. relationship with Ukraine, suggesting that the original article may have been erroneous.

While economic incentives for proliferation certainly exist, it is difficult to conclude that there is a serious and systematic problem of WMD proliferation by the Ukrainians. Despite the public commitments that Ukrainian leaders have made to upholding nonproliferation, it is still possible that, in some instances, they may be willing to allow sensitive technology to escape serious scrutiny in order to make a sale.

In general, Ukraine's supportive nonproliferation policy has led to a closer relationship with the West, opening up markets to Ukraine's space industry, expanding business opportunities, and bringing in direct financial assistance. In the unlikely event this relationship and its economic benefits were to deteriorate, Ukraine might then reverse its commitment to nonproliferation. Given this scenario, Ukraine would have a disincentive to support nonproliferation because unrestricted space and missile sales to countries such as Libya, Iran, China, and India, for example, would make up for some of the lost business and income from the West. Ukrainian government and industry officials have made it clear that they are eager for increased space cooperation with the U.S. and other Western countries, but without such cooperation, they would not hesitate to market their space services to other countries without regard to those countries' proliferation records.[14]

Disincentives for Ukraine to Join the MTCR

Ukraine does not believe it has to join the MTCR to support missile nonproliferation. Although it is not opposed to the MTCR, it is unwilling to accept the U.S. condition that it give up its Category I missile programs to join the regime. There are two basic disincentives for joining under these conditions.

The first disincentive is related to Ukraine's pride in its space and missile capabilities and its reluctance to yield to the U.S. on what it believes is an issue of national sovereignty. It is particularly disturbing to Ukrainian officials that the new U.S. policy on MTCR partnership places Ukraine in the same category as new members like Hungary, Switzerland, and Luxembourg, none of whom have any advanced space or missile development capabilities.[15] Ukraine bristles at the fact that the U.S. expects it to relinquish part of its high technology industry that is a great source of pride and which it essentially considers a national treasure. In Ukraine's view, the MTCR is an export control regime, not a disarmament regime, and so it should not have to give up anything to join, particularly since several other members, including the U.S. and Russia, have not given up their short-range missiles. Ukraine has been ambivalent about whether it will actually develop any new missiles. But it does not want to give up what it believes is a sovereign right to develop missiles that are not banned by its treaty obligations. As one Ukrainian diplomat has been reported to say, "The Americans have denuclearized Ukraine, now they want us to give up our missile program. What will they demand next: to give up machine guns?"[16]

The second disincentive for giving up missiles is Ukraine's claim that it may need them for defense if threatened.[17] Ukraine's independence is a relatively new experience

in its history of domination by its neighbors. Ukraine's centuries-old subjugation by Russia; its failed attempt at independence just after the 1917 revolution; the division of the bulk of its territory between Poland and the Soviet Union during the period between the world wars; its brutal treatment under Stalin and the Nazis; and then full incorporation within the Soviet Union after World War II - these are all reminders of the imperative of preserving its new independence. The 1997 Treaty on Friendship, Cooperation, and Partnership between Ukraine and Russia formally recognizes Ukraine's independence and relinquishes Russia's long-running claims on Crimea, but Ukraine cannot be certain that a future Russian government will be as understanding and cooperative. Although optimistic about the greatly improved relationship between Ukraine and Russia, President Kuchma has acknowledged that the formation of such a relationship based on equal rights "has been somewhat difficult."[18]

Only a few years ago, nationalist voices in the Russian parliament were arguing that the Crimean area, which has a predominantly ethnic Russian population, and was ceded to Ukraine by Russia in 1954, should be part of the Russian Federation.[19] Crimea, as well, has sought increasing political autonomy from the Ukrainian government and has its own parliament. The status of the 300-ship Black Sea Fleet was the subject of a long-running dispute between Ukraine and Russia, although an agreement accompanying the recent friendship treaty has helped resolve this.

Ukraine's population is about 22 percent ethnic Russian, mostly established in the Crimean area and in eastern Ukraine.[20] The ethnic Russian population does not necessarily view Russia as an imperialist power, in contrast to the larger Ukrainian nationalist population in the west-central part of the country.[21] Although serious ethnic

conflict has not occurred within Ukraine since independence, this is still a potential flashpoint, particularly if Ukraine's economic situation deteriorates. Ethnic tensions in Ukraine might induce Russia to become involved if it felt the ethnic Russian minority were ill-treated. Ukraine's dependence on Russia for more than 80 percent of its energy may also become a source of future tension if Russia decided to use it as a lever to influence Ukraine's policies.[22]

Therefore, while relations with Russia and Ukraine's neighbors are improving, Ukraine is still maintaining a cautious perspective, which is why it has been adamant about preserving its missile capabilities as a possible deterrent.

Notes

[1] Dana Priest, "Ukraine Savors New Ties With NATO," *Washington Post*, 14 July 1997.

[2] Gary Bertsch and Victor Zaborsky, "Bringing Ukraine Into the MTCR: Can U.S. Policy Succeed?" *Arms Control Today* 27, no. 2 (April 1997): 13.

[3] FBIS-SOV-97-019, 30 January 1997, n.p.; on-line, Internet, 18 November 1997, available from http://fbis.fedworld.gov.

[4] Victor Zaborsky and Scott Jones, "Ukraine," in *Restraining the Spread of the Soviet Arsenal: NIS Nonproliferation Export Controls*, ed. Gary Bertsch (Athens, GA: The Center for International Trade and Security, 1996), 29.

[5] FBIS-TAC-07-004, 18 March 1997, n.p.; on-line, Internet, 18 November 1997, available from http://fbis.fedworld.gov.

[6] Ibid.

[7] FBIS-TAC-97-235, 26 August 1997, n.p.; on-line, Internet, 18 November 1997, available from http://fbis.fedworld.gov.

[8] James Kraska, *Defense News* 18, no. 39 (4 October 1993), 26.

[9] Jeffrey Smith, "Iraq Buying Missile Parts Covertly," *Washington Post*, 14 October 1995.

[10] Victor Zaborsky and Scott Jones, *NIS Nonproliferation Export Controls: Ukraine, 1996*, (Washington, D.C.: The National Council for Soviet and East European Research, 25 October 1996), 11.

[11] Bill Gertz, "Kiev Imperils U.S. Aid With Libya Arms Deal," *Washington Times*, 9 December 1996.

[12] Yaro Bihun, "Ukraine's Ambassador Reacts to Reports of Libyan Connection," *The Ethnic NewsWatch*, 23 June1996.

Notes

[13] FBIS-SOV-97-267, 25 August 1997, n.p.; on-line, Internet, 18 November 1997, available from http://fbis.fedworld.gov.

[14] Victor Zaborsky, "Viewpoint: U.S. Missile Nonproliferation Strategy Toward the NIS and China: How Effective?" *The Nonproliferation Review*, Fall 1997, 90.

[15] John C. Baker, *Non-Proliferation Incentives Project: Aerospace Industries Workshop and Ukraine Trip Report*, (London: International Institute of Strategic Studies, August 1996), 8.

[16] Gary Bertsch and Victor Zaborsky, "Bringing Ukraine Into the MTCR: Can U.S. Policy Succeed?" 12.

[17] FBIS-TAC-97-169, 20 June 1997, n.p.; on-line, Internet, 18 November 1997, available from http://fbis.fedworld.gov.

[18] FBIS-SOV-97-325, 25 November 1997, n.p.; on-line, Internet, 2 December 1997, available from http://fbis.fedworld.gov.

[19] Taras Kuzio, *Ukrainian Security Policy*, (Westport, CT: Praeger, 1995), 70.

[20] Daniel C. Diller, Russia and the Independent States, (Washington, D.C.: Congressional Quarterly, 1993), 289.

[21] Kuzio, *Ukrainian Security Policy*, 14.

[22] Matthew Brzezinski, "In Ukraine, Cold War Still Seems to Rage," *Wall Street Journal*, 24 July 1996.

Chapter 6

Conclusion

The U.S. policy of engagement may appear contradictory with regard to Ukraine because the U.S. is anxious to facilitate Ukraine's economic development, while, on the other hand, it wants Ukraine to give up its potentially lucrative missile industry. But, in reality, there is no contradiction when these policies are viewed in the context of U.S. efforts to shape the evolution of Ukraine's policies and behavior. The U.S. certainly wants to facilitate the development and reform of Ukraine's economy because this will enhance stability and support the process of democratization. But U.S. support for Ukrainian economic development is also constrained by U.S. WMD nonproliferation interests. Even though Ukraine might benefit economically from foreign missile technology sales, the U.S. is adamantly opposed to this. And though Ukraine has pledged not to export its missile technology, the U.S. is still concerned about the temptations and potential for leakage.

As part of its overall WMD counterproliferation effort, the U.S. is intent on reducing the availability of ballistic missile capabilities and technologies in the world. For this reason it has unilaterally imposed the requirement that new MTCR partners must renounce their Category I missile programs. Even though this requirement is currently unacceptable to Ukraine, the U.S. has been unwilling to make an exception for the sake of

gaining Ukraine's admission. The U.S. does not want other nations to question its lack of firmness in seeking reductions in worldwide ballistic missile capabilities.

Ukraine's partnership in the MTCR would strengthen the regime, but it is not critical. Ukraine's pledge to adhere to the MTCR guidelines theoretically brings its export control behavior into conformity with the regime. The U.S. is counting on Ukraine to uphold this commitment. The U.S. has not and should not make a major political issue over Ukraine's unwillingness to give up its missile programs. The overall positive U.S.-Ukrainian relationship is too important to be disrupted over the MTCR impasse.

Ukraine's complaints about discrimination because Russia has not had to give up its Category I missiles as a new partner avoids the fact that Russia and Ukraine have significantly different weapons capabilities. The U.S. accepts the fact that Russia has weapons of mass destruction and delivery capabilities, and that it will not give them up unilaterally. Ukraine has presumably eliminated its warheads of mass destruction and so it does not have the same justification for delivery systems. But this does not mean Ukraine's beliefs about its sovereign right to maintain missiles or its perceptions about its need for missiles for defensive reasons should not be taken seriously by the U.S. and other countries. Over time, Ukraine may indeed ease its position on these issues. The U.S. should continue to provide incentives to facilitate a change in the Ukrainian attitude toward retaining its missile program.

U.S. and other Western nations should continue to encourage commercial and international space cooperative ventures to help change Ukraine's identity from being a former ICBM manufacturer to a civilian space power. Ukraine's continuing effort to maintain military missiles only clouds the international perception of it as an emerging

space power. The U.S.-Ukraine launch agreement provides Ukraine the opportunity to compete for only a limited number of U.S. launches and it expires at the end of 2001. Provided Ukraine adheres to its nonproliferation commitments, the U.S. should consider extending the agreement and opening up a larger portion of the market. Cooperative space initiatives, such as Ukraine's involvement with the International Space Station and flying a cosmonaut aboard the space shuttle in November 1997, are a great source of prestige for Ukraine and foster understanding and cooperation with the West. These types of efforts are important and should continue because they can serve to influence Ukraine's attitude toward the values and perspectives of the West, thus encouraging supportive nonproliferation actions.

The continuation of American financial aid should also be a high priority for the U.S. to help Ukraine develop a viable commercial space industry to help offset temptations to proliferate its sensitive missile technologies.

Ukraine has been an active participant in the Partnership for Peace program and NATO should continue to encourage close cooperation. A closer relationship with NATO, perhaps ultimately including full-fledged membership, would boost Ukraine's prestige and might help it feel more secure and confident in relinquishing its ballistic missile interests. A positive relationship with NATO will also facilitate Ukraine's relationship with the European Union, thus promoting further economic growth opportunities.

As its economic, political and military relationships with other nations become stronger and more productive, Ukraine will hopefully conclude that its missile program is a relic of its past. It may want to remove this reason for other nations to potentially

have any lingering doubts about its commitment to missile nonproliferation. Willingly eliminating its missiles under peaceful conditions would be just as much a reflection of its sovereignty as retaining the missiles. The U.S. must continue to engage Ukraine to ultimately help it make such a decision with confidence and security.

Bibliography

Alexander, Bretton. *Space Launch and Ukraine – Outlook for the Future*. Briefing. Anser Center for International Aerospace Cooperation, 23 May 1996.

Arms Control and Disarmament Agency. "Missile Technology Control Regime (MTCR) Guidelines," 11 June 1996, n.p.; On-line, Internet, 6 Nov 97. Available from http://www.acda.gov/treaties/mtcr.htm.

Baker, John C. Non-Proliferation Incentives Project: Aerospace Industries Workshop and Ukraine Trip Report. London: International Institute of Strategic Studies, August 1996.

Baker, John C. *Non-Proliferation Incentives for Russia and Ukraine*, Adelphi Paper 309. New York: Oxford University Press, Inc.,1997.

Bertsch, Gary and Victor Zaborsky. "Bringing Ukraine Into the MTCR: Can U.S. Policy Succeed?" *Arms Control Today* 27, no. 2 (April 1997): 9-14.

Bihun, Yaro. "Ukraine's Ambassador Reacts to Reports of Libyan Connection," *The Ethnic NewsWatch*, 23 June1996.

Brzezinski, Matthew. "In Ukraine, Cold War Still Seems to Rage," *Wall Street Journal*, 24 July 1996.

Craft, Cassady, et al. "Nonproliferation Tools and Methods for Evaluating National Systems of Export Control" In *Restraining the Spread of the Soviet Arsenal: NIS Nonproliferation Export Controls*. Edited by Gary Bertsch. Athens, GA: The Center for International Trade and Security, 1996.

Department of Defense Background Briefing. *Secretary of Defense Trip to Ukraine*, June 1996, n.p. On-line. Internet, 27 October 1997. Available from http://defenselink.mil/news/Jun1996/x060496_x0529ukr.html.

Diller, Daniel C. Russia and the Independent States. Washington, D.C.: Congressional Quarterly, 1993.

Egorov, Igor. "The Transformation of R&D Potential in Ukraine," *Europe-Asia Studies*, 47, no. 4 (4 November 1995):651-669.

FBIS-SOV-97-019. 30 January 1997, n.p. On-line. Internet, 18 November 1997, available from http://fbis.fedworld.gov.

FBIS-SOV-97-190, 10 July 1997, n.p. On-line. Internet, 2 December 1997. Available from http://fbis.fedworld.gov.

FBIS-SOV-97-258, 16 September 1997, n.p. On-line. Internet, 2 December 1997. Available from http://fbis.fedworld.gov.

FBIS-SOV-97-267, 25 August 1997, n.p. On-line. Internet, 18 November 1997. Available from http://fbis.fedworld.gov.

FBIS-SOV-97-325, 25 November 1997, n.p. On-line. Internet, 2 December 1997. Available from http://fbis.fedworld.gov.
FBIS-TAC-07-004, 18 March 1997, n.p.. On-line. Internet, 18 November 1997. Available from http://fbis.fedworld.gov.
FBIS-TAC-97-007, 2 June 1997, n.p. On-line. Internet, 6 November 1997. Available from http://fbis.fedworld.gov.
FBIS-TAC-97-169, 20 June 1997, n.p. On-line. Internet, 18 November 1997. Available from http://fbis.fedworld.gov.
FBIS-TAC-97-235, 26 August 1997, n.p. On-line. Internet, 18 November 1997, available from http://fbis.fedworld.gov.
Gertz, Bill. "Kiev Imperils U.S. Aid With Libya Arms Deal," *Washington Times*, 9 December 1996.
Kraska, James. *Defense News* 18, no. 39 (4 October 1993): 26.
Kuzio, Taras. "Ukraine's Military Industrial Plan." *Jane's Intelligence Review*, August 1994, 352-355.
Kuzio, Taras. *Ukrainian Security Policy*. Westport, CT: Praeger, 1995.
"Missile Technology Control Regime (MTCR) Equipment and Technology Annex," 1 July 1993. n.p. On-line, Internet, 16 Nov 97. Available from http://www.fas.org/asmp/ campaigns/missiles/techannex.htm.
Perlez, Jane. "On Ukraine's Capitalist Path." *New York Times*, 18 October 1996.
Priest, Dana. "Ukraine Savors New Ties With NATO," *Washington Post*, 14 July 1997.
Secretary of State Madeleine K Albright and President of Ukraine Leonid Kuchma and Foreign Minister Haddadiy Ukovenko Remarks at Signing Ceremony on Several Agreeements, Mariinskiy Palace, Kiev, Ukraine, March 6 1998" , n.p. On-line, Internet, 30 March 1998, available from http://secretary.state.gov/www/statements/1998/980306a.html
Skootsky, Mark D. "An Annotated Chronology of Post-Soviet Nuclear Disarmament 1991-1994," *The Nonproliferation Review* 2, no. 3 (Spring-Summer 1995): 64-105.
Smith, Jeffrey. "Iraq Buying Missile Parts Covertly," *Washington Post*, 14 October 1995.
The White House. A National Security Strategy for a New Century, Washington D.C., May 1997.
The White House, Office of the Press Secretary. "Transcript of Remarks by President Clinton, Prime Minister of Spain Aznar, Secretary General of NATO Solana, and President Kuchma of Ukraine in Signing Ceremony of NATO-Ukraine Charter," 9 July 1997, n.p. On-line. Internet, 25 January 1998. Available from http://www2.whitehouse.gov/WH/New/Spain/19970709-2125.html.
Tsimbalyuk, Vladimir. "Export Controls in Ukraine." *The Monitor* 1, no. 4 (Fall 1995): 1-4.
U.S. Congress, Office of Technology Assessment. *Proliferation and the Former Soviet Union*. Washington, D.C.: U.S. Government Printing Office, September 1994.
Vaschilin, Victor. "State Export Controls in Ukraine." *The Monitor* 3, no. 3 (Summer 97): 12-14.
Zaborsky, Victor and Scott Jones. "Ukraine." In *Restraining the Spread of the Soviet Arsenal: NIS Nonproliferation Export Controls*. Edited by Gary Bertsch. Athens, GA: The Center for International Trade and Security, 1996.

Zaborsky, Victor L. *Ukraine: How to Fulfill START Obligations and U.S.-Ukraine Face a Missile Impasse.* Washington, D.C.: The National Council for Soviet and East European Research, October 1996.

Zaborsky, Victor L. *Ukraine's Niche in the US Space Launch Market: Will Kiev's Hopes Come True?* Washington, D.C.: The National Council for Soviet and East European Research, October 1996.

Zaborsky, Victor L. "Viewpoint: U.S. Missile Nonproliferation Strategy Toward the NIS and China: How Effective?" *The Nonproliferation Review*, Fall 1997, 88-94.

DISTRIBUTION A:

Approved for public release; distribution is unlimited.

Air War College
Maxwell AFB, Al 36112